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David H. Bessel

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EXAMINER

PARRY, CHRISTOPHER L

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/826,198	Applicant(s) BESSEL, DAVID H.	
	Examiner CHRIS PARRY	Art Unit 2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,7-11 and 28-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,7-11 and 28-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Arguments

2. Applicant's arguments, see page 6, last paragraph, filed 8 May 2009, with respect to the rejection(s) of claim(s) 1 and 28 under 35 U.S.C. 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Barton et al. (USPN 6,233,389 B1).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1 and 28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As for Claims 1 and 28, the specification states the demultiplexer 103 is used to send a received video signal to a hard disk drive 107, a MPEG 2 decoder 104, or both (page 8, ¶ 43-46). However, the specification fails to clearly define how the demultiplexer 103 is used to separate signals from the received multiplexed signal and fails to further show how the demultiplexer outputs two separated signals (i.e., a video signal and an audio signal or a video and data signal) as is known in the art. One skilled in the art would assume from reading the specification and reviewing figure 2 that the claimed demultiplexer acts as a switch as it appears the demultiplexer is outputting the exact same video signal to both the hard disk drive and the MPEG 2 decoder.

For purposes of an art rejection, the claimed demultiplexer will be treated as a switch which is capable of outputting a signal to a hard disk drive and an MPEG 2 decoder.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 5, 7-11, and 28-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art "AAPA" (figure 1; pages 1-5) in view of Barton et al. "Barton" (USPN 6,233,389).

Regarding Claim 1, AAPA discloses a television signal processing and recording system (figure 1) for handling both digital and analog video signals (pages 3-4; ¶ 16), said system comprising:

an analog signal path (i.e., signal output from tuner 101) comprising an analog tuner (101 – figure 1), a video decoder (109 – figure 1) for converting an analog signal to a digital signal (page 4, ¶ 18), and an encoder (105 – figure 1) for compressing said digital signal output by said video decoder [109] (page 4, ¶ 18);

a digital signal path (i.e., signal output from tuner 102) comprising a digital tuner (102 – figure 1) and a demultiplexer (103 - figure 1) (page 4, ¶ 19); and

wherein said demultiplexer outputs a demultiplexed signal to either a decoder (104 – figure 1) with output to a display device (106 – figure 1) or a digital data storage device (107 – figure 1) (page 4, ¶ 19).

AAPA further discloses after analog signal is decoded by decoder 109, the signal can be sent to television 106 for display or the signal can be forwarded to be compressed by MPEG2 encoder 105, where the signal is output to and recorded on a hard disk drive 107 (see page 4, ¶ 18). AAPA fails to specifically disclose a connection for routing said compressed digital signal from said encoder of said analog signal path to said demultiplexer.

In an analogous art, Barton discloses a television signal processing and recording system (figures 1 and 7) for handling both digital (i.e., ATSC) and analog video signals (i.e., NTSC), said system comprising:

an analog signal path (i.e., input section 101 receives inputs in a multitude of forms including NTSC) comprising an analog tuner (i.e., input section 101 tunes the channel of the specific program), a video decoder for converting an analog signal to a digital signal (i.e., input section 101 must first convert the received analog signal into a digital signal before the analog signal can be encoded into MPEG format), and an encoder (703 – figure 7) for compressing said digital signal (figures 1 and 7; Col. 3, lines 30-61 and Col. 6, lines 26-35);

a digital signal path (i.e., input section 101 receives inputs in a multitude of forms including digital forms such as ATSC) comprising a digital tuner (i.e., input section 101 tunes the channel of the specific program) and a demultiplexer (media switch 102/701 – figs. 1 & 7) (i.e., media switch 102 outputs the received stream from input section 101 to the output section 103 and simultaneously to storage device 105) (Col. 3, line 30 to Col. 4, line 2; Col. 4, lines 23-44; and Col. 6, lines 26-65); and

a connection (i.e., the connection between input section 101 and media switch 102) for routing said compressed digital signal from said encoder [703] of said analog signal path to said demultiplexer [102/701] (i.e., encoder 703 provides the analog signal that was encoded into MPEG format to media switch 701) (Col. 3, lines 49-65 and Col. 6, lines 26-35);

wherein said demultiplexer [102/701] outputs a demultiplexed signal to either a decoder (715 – figure 7) with output to a display device (TV 716 – figure 7) or a digital data storage device (105/710 – figs. 1 & 7) (Col. 3, line 62 to Col. 4, line 14 and Col. 6, line 26 to Col. 7, line 4).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify AAPA to include a connection for routing said compressed digital signal from said encoder of said analog signal path to said demultiplexer as taught by Barton to facilitate combining prior art elements according to known methods to yield predictable results of efficiently routing signals through a system that provides output to a television set and a recording device.

As for Claim 5, AAPA and Barton disclose, in particular AAPA teaches wherein said digital data storage device (107 – figure 1) is a hard disk drive (pages 3-4, ¶ 16-19).

As for Claim 7, AAPA and Barton disclose, in particular AAPA teaches wherein said encoder [105] is an MPEG2 encoder (page 4, ¶ 18, see also figure 1).

As for Claim 8, AAPA and Barton disclose, in particular AAPA teaches wherein said decoder [104] is an MPEG2 decoder (page 4, ¶ 19, see also figure 1).

As for Claim 9, AAPA and Barton disclose, in particular Barton teaches wherein said video decoder [101], encoder [703], connection and decoder [715] are incorporated in a set-top box (see figs. 1 and 7; Col. 3, line 30 to Col. 4, line 8).

As for Claim 10, AAPA and Barton disclose, in particular Barton teaches wherein said digital data storage device [105/710] is incorporated in a personal video recorder (Col. 3, line 30 to Col. 4, line 8).

As for Claim 11, AAPA and Barton disclose, in particular Barton teaches wherein said video decoder [101], encoder [703], connection, decoder [715] and digital data storage device [105/710] are incorporated in a single set-top unit (see figs. 1 and 7; Col. 3, line 30 to Col. 4, line 8).

Regarding Claim 28, AAPA discloses a method for handling both digital and analog video signals (pages 3-4; ¶ 16), said method comprising:

processing analog signals, when input, in an analog signal path (i.e., signal output from tuner 101) comprising an analog tuner (101 – figure 1), a video decoder (109 – figure 1) for converting an analog signal to a digital signal (page 4, ¶ 18), and an encoder (105 – figure 1) for compressing said digital signal output by said video decoder [109] (page 4, ¶ 18);

processing digital signals, when input, in a digital signal path (i.e., signal output from tuner 102) comprising a digital tuner (102 – figure 1) and a demultiplexer (103 - figure 1) (page 4, ¶ 19); and

with said demultiplexer, selectively outputting a signal to either a decoder (104 – figure 1) with output to a display device (106 – figure 1) or a digital data storage device (107 – figure 1) (page 4, ¶ 19).

AAPA further discloses after analog signal is decoded by decoder 109, the signal can be sent to television 106 for display or the signal can be forwarded to be compressed by MPEG2 encoder 105, where the signal is output to and recorded on a hard disk drive 107 (see page 4, ¶ 18). AAPA fails to specifically disclose routing said compressed digital signal from said encoder of said analog signal path to said demultiplexer.

In an analogous art, Barton discloses a method for handling both digital and analog video signals, said method comprising:

processing analog signals, when input, in an analog signal path (i.e., input section 101 receives inputs in a multitude of forms including NTSC) comprising an analog tuner (i.e., input section 101 tunes the channel of the specific program), a video decoder for converting an analog signal to a digital signal (i.e., input section 101 must first convert the received analog signal into a digital signal before the analog signal can be encoded into MPEG format), and an encoder (703 – figure 7) for compressing said digital signal (figures 1 and 7; Col. 3, lines 30-61 and Col. 6, lines 26-35);

processing digital signals, when input, in a digital signal path (i.e., input section 101 receives inputs in a multitude of forms including digital forms such as ATSC) comprising a digital tuner (i.e., input section 101 tunes the channel of the specific program) and a demultiplexer (media switch 102/701 – figs. 1 & 7) (i.e., media switch 102 outputs the received stream from input section 101 to the output section 103 and simultaneously to storage device 105) (Col. 3, line 30 to Col. 4, line 2; Col. 4, lines 23-44; and Col. 6, lines 26-65); and

routing said compressed digital signal from said encoder [703] of said analog signal path to said demultiplexer [102/701] (i.e., encoder 703 provides the analog signal that was encoded into MPEG format to media switch 701) (Col. 3, lines 49-65 and Col. 6, lines 26-35);

with said demultiplexer [102/701], selectively outputting a signal to either a decoder (715 – figure 7) with output to a display device (TV 716 – figure 7) or a digital data storage device (105/710 – figs. 1 & 7) (Col. 3, line 62 to Col. 4, line 14 and Col. 6, line 26 to Col. 7, line 4).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify AAPA to include routing said compressed digital signal from said encoder of said analog signal path to said demultiplexer as taught by Barton to facilitate combining prior art elements according to known methods to yield predictable results of efficiently routing signals through a system that provides output to a television set and a recording device.

As for Claim 29, AAPA and Barton disclose, in particular AAPA teaches wherein said digital data storage device (107 – figure 1) is a hard disk drive (pages 3-4, ¶ 16-19).

As for Claim 30, AAPA and Barton disclose, in particular AAPA teaches wherein said encoder [105] is an MPEG2 encoder (page 4, ¶ 18, see also figure 1).

As for Claim 31, AAPA and Barton disclose, in particular AAPA teaches wherein said decoder [104] is an MPEG2 decoder (page 4, ¶ 19, see also figure 1).

As for Claim 32, AAPA and Barton disclose, in particular Barton teaches wherein said video decoder [101], encoder [703], connection and decoder [715] are incorporated in a set-top box (see figs. 1 and 7; Col. 3, line 30 to Col. 4, line 8).

As for Claim 33, AAPA and Barton disclose, in particular Barton teaches wherein said digital data storage device [105/710] is incorporated in a personal video recorder (Col. 3, line 30 to Col. 4, line 8).

As for Claim 34, AAPA and Barton disclose, in particular Barton teaches wherein said video decoder [101], encoder [703], connection, decoder [715] and digital data storage device [105/710] are incorporated in a single set-top unit (see figs. 1 and 7; Col. 3, line 30 to Col. 4, line 8).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRIS PARRY whose telephone number is (571) 272-8328. The examiner can normally be reached on Monday through Friday, 8:00 AM EST to 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN MILLER can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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